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(54) Title: METHODS AND COMPOSITIONS FOR THE PROMOTION OF HAIR GROWTH UTILIZING ACTIN BINDING PEPTIDES

(57) Abstract: Disclosed herein are methods and compositions suitable for the promotion of hair growth on humans and other animals. Disclosed embodiments include compositions comprising actin-binding peptides. In some embodiments, the actin-binding peptides comprise fragments of thymosin  $\beta_4$ . In other embodiments, the disclosure provides compositions comprising fragments of thymosin  $\beta_4$  and/or other actin-binding peptides that are suitable for the treatment of alopecia and other conditions associated with hair loss. In still further embodiments, the disclosure provides compositions comprising the sequence of approximately six or seven amino acids of the thymosin  $\beta_4$  sequence that bind actin.

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## INTERNATIONAL SEARCH REPORT

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## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 7/06  
 US CL : 514/2; 530/300

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 514/2; 530/300

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 medline, biosis, caplus on STN, search terms- hair growth, alopecia, thymosin B4, actin binding peptide

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 4,297,276 A (GOLDSTEIN et al) 27 October 1981 (27.10.1981) column 13-14, claims 1-2.	1-32
A	WO 96/11016 A1 (ALPA 1 BIOMEDICALS, INC.) 18 April 1996 (18.04.1996) page 45, figure 1A.	1-32

 Further documents are listed in the continuation of Box C. 

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